



PTO/SB/21 (02-04)

Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**TRANSMITTAL  
FORM**

(to be used for all correspondence after initial filing)

Application Number	10/668,526
Filing Date	09/23/2003
First Named Inventor	Ba-Zhong Shen, Ph.D.
Art Unit	2133
Examiner Name	n/a
Attorney Docket Number	BP3089

Total Number of Pages in This Submission

4

**ENCLOSURES (Check all that apply)**

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Fee Transmittal Form<br><input type="checkbox"/> Fee Attached (via credit card payment form PTO-2038)<br><input checked="" type="checkbox"/> Amendment/Reply<br><input type="checkbox"/> After Final <input checked="" type="checkbox"/> Preliminary Amendment (3 pages)<br><input type="checkbox"/> Affidavits/declaration(s)<br><input type="checkbox"/> Extension of Time Request<br><input type="checkbox"/> Express Abandonment Request<br><input type="checkbox"/> Information Disclosure Statement<br><input type="checkbox"/> Certified Copy of Priority Document(s)<br><input type="checkbox"/> Response to Missing Parts/Incomplete Application<br><input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s)<br><input type="checkbox"/> Licensing-related Papers<br><input type="checkbox"/> Petition<br><input type="checkbox"/> Petition to Convert to a Provisional Application<br><input type="checkbox"/> Power of Attorney, Revocation<br><input type="checkbox"/> Change of Correspondence Address<br><input type="checkbox"/> Terminal Disclaimer<br><input type="checkbox"/> Request for Refund<br><input type="checkbox"/> CD, Number of CD(s) _____ | <input type="checkbox"/> After Allowance communication to Technology Center (TC)<br><input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences<br><input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)<br><input type="checkbox"/> Proprietary Information<br><input type="checkbox"/> Status Letter<br><input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):<br><b>see remarks below</b> |
|--|--|---|

**Remarks** The following are also being submitted herewith:  
Return Postcard**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm or Individual name	Garlick Harrison & Markison, LLP (USPTO CN 34399) Shayne X. Short, Ph.D. (Reg. No. 45,105)
Signature	
Date	08/21/2004

**CERTIFICATE OF TRANSMISSION/MAILING**

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name	Shayne X. Short, Ph.D. (Reg. No. 45,105)		
Signature		Date	08/21/2004

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

2133  
IFW



**PATENT APPLICATION  
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**Inventor(s):** Ba-Zhong Shen, Ph.D.,  
Hau Thien Tran, and  
Dr. Kelly Brian Cameron

**Examiner:** n/a

**Application Serial No:** 10/668,526

**Art Group:** 2133

**Application Filing Date:** 09/23/2003

**Confirmation No:** 1888

**Patent No:** n/a

**Attorney Docket No:** BP3089

**Patent Issue Date:** n/a

**Title:** LDPC (Low Density Parity Check) coded modulation symbol decoding

Date: Saturday, August 21, 2004 (08/21/2004)

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**PRELIMINARY AMENDMENT**

Dear Sir or Madam:

The Applicant respectfully requests that the Examiner enter the amendment to the "CROSS REFERENCE TO RELATED PATENTS/PATENT APPLICATIONS" section as indicated below.

On page 1, starting at line 3, please amend the "CROSS REFERENCE TO RELATED PATENTS/PATENT APPLICATIONS" section as follows:

**"CROSS REFERENCE TO RELATED PATENTS/PATENT APPLICATIONS"**

The present U.S. Utility Patent Application claims priority pursuant to 35 U.S.C. § 119(e) to the following U.S. Provisional Patent Applications which are hereby incorporated herein by reference in their entirety and made part of the present U.S. Utility Patent Application for all purposes:

- ~~1. U.S. Provisional Patent Application Serial No. 60/384,698, entitled "Variable code rate and signal constellation turbo trellis coded modulation codec," (Attorney Docket No. BP 2333), filed May 31, 2002 (05/31/2002), pending.~~

1.2. U.S. Provisional Application Serial No. 60/478,690, "Coded modulation with LDPC (Low Density Parity Check) code using variable maps and metric updating," (Attorney Docket No. BP3036), filed June 13, 2003 (06/13/2003), pending.

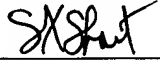
2.3. U.S. Provisional Application Serial No. 60/490,967, "LDPC (Low Density Parity Check) coded modulation symbol decoding," (Attorney Docket No. BP3089), filed July 29, 2003 (07/29/2003), pending.

~~The present U.S. Utility Patent Application also claims priority pursuant to 35 U.S.C. § 120 to the following U.S. Utility Patent Application which is hereby incorporated herein by reference in its entirety and made part of the present U.S. Utility Patent Application for all purposes:~~

1. U.S. Utility Application Serial No. 10/264,486, entitled "Variable code rate and signal constellation turbo trellis coded modulation codec," (Attorney Docket No. BP 2333), filed October 4, 2002 (10/04/2002), pending, which claims priority pursuant to 35 U.S.C. § 119(e) to U.S. Provisional Patent Application Serial No. 60/384,698, entitled "Variable code rate and signal constellation turbo trellis coded modulation codec," (Attorney Docket No. BP 2333), filed May 31, 2002 (05/31/2002), pending."

The Examiner is invited to contact the undersigned by telephone or facsimile if the Examiner believes that such a communication would advance the prosecution of the present patent application, or if the Examiner has any additional questions or concerns.

RESPECTFULLY SUBMITTED,

By:   
Shayne X. Short, Ph.D.  
Reg. No. 45,105  
Direct Phone: (512) 825-1145  
Direct Fax No. (512) 394-0054

**GARLICK HARRISON & MARKISON LLP**

ATTORNEYS AT LAW

USPTO CN 34399

P.O. Box 160727

AUSTIN, TEXAS 78716-0727

TELEPHONE (512) 825-1145 / FACSIMILE1 (512) 394-0054 / FACSIMILE2 (512) 264-3735